

### Notice of Allowability

**Application No.**

10/017,032

**Examiner**

Keith Hendricks

**Applicant(s)**

SHIN ET AL.

**Art Unit**

1761

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
  2. ☒ The allowed claim(s) is/are 1-9, 11, 12, 14 and 15.
  3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
  4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
    - (a) ☐ The translation of the foreign language provisional application has been received.
  6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                             | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____  | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment                  |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|  | 9 <input type="checkbox"/> Other  |

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Peter Martine on December 8, 2003.

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*Please amend claim 1 to read as follows:*

1. An enriched milk with capsules, said capsule ~~[composing]~~ comprising:  
a primary core containing hydrogenated oil in which nutrients are dispersed ~~[therein]~~;  
a second core layer which surrounds the primary core to prevent loss of nutrients contained in the primary core, wherein the second core layer comprises hydrogenated oil and lecithin; and  
an outer layer which covers the second core layer to maintain the shape of the capsules, wherein the outer layer comprises two or more materials selected from the group consisting of gelatin, sorbitol and agar.

Please cancel claims 10 and 13.

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Note: The amendments above were made to more clearly define applicant's invention, and were not necessarily made to overcome any known prior art.

The following is an examiner's statement of reasons for allowance:

As stated at pages 1-2 of the specification,

There are common milk products enriched with such nutrients as vitamins A and D, iron and DHA, but, because these additives have a bad effect on taste of milk, a large amount of such ingredients can't be added.

...The inventor in this invention has endeavored to solve the conventional problems as described above, and has found a way of encapsulating ingredients deficient in milk and adding them to milk, thereby preserving taste of milk and simultaneously enabling easy ingestion.


The prior art of record was known to provide milk or milk products which contained added nutrients, or which contained capsules to provide various added materials. For example, see US PAT 6,491,955, directed to a milk containing beta-D-galactosidase which was microencapsulated with fatty acid esters. US PAT 6,156,354 involves the microdispersion of vitamin E in milk, and US PAT 6,447,823 is directed to a liquid yogurt product containing lactic acid bacteria which are encapsulated with a hardened oil and a starch, whereby the specific gravity of the capsules is equal to that of the liquid yogurt to maintain the capsules in a uniformly dispersed state. While each of these references establishes and contributes to the general state of the art at the time the current invention was made, they do not teach or suggest, alone or in combination, the specifically-claimed invention. In the instant application, the use of the three layers to encapsulate nutrients within milk, each layer of which is formulated from the components as recited in claim 1, was not taught or suggested by the prior art of record. While the '823 patent cited above provided capsules in a liquid yogurt (milk product) whereby the specific gravity of the capsules is equal to that of the fermented milk product to maintain the capsules in a uniformly dispersed state, this would not anticipate the instant invention where the capsules provide a specific gravity equal to that of milk, as in claim 2, particularly due to the recited components in independent claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Hendricks whose telephone number is (571) 272-1401. The examiner can normally be reached on M-F (8:30am-6pm); First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



KEITH HENDRICKS  
PRIMARY EXAMINER